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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460
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SACE Comments on New Source Performance Standards for GHG Emissions from New and Reconstructed EGUs; Emission Guidelines for GHG Emissions from Existing EGUs; and Repeal of the Affordable Clean Energy Rule, Docket ID EPA-HQ-OAR-2023- 0072

The Southern Alliance for Clean Energy (SACE) is a nonprofit organization that promotes responsible and equitable energy choices to ensure clean, safe, and healthy communities throughout the Southeast.

SACE strongly supports the Environmental Protection Agency (EPA) implementing the strongest possible guidelines and standards to reduce carbon pollution from power plants and offers these comments.

Background and Statement of Need

SACE has worked on energy policy for three decades, primarily in the power sector, and views 111(b) and 111(d) protections as among the most important mechanisms to protect human health and environmental quality from climate pollution.

Climate warming, caused by burning fossil fuels, is causing catastrophic harm to the people and places we love. Climate warming threatens our families' and communities' health, lowers our quality of life, and causes economic hardship. In order to avoid the worst impacts of climate warming, the world's economies must reach net-zero climate emissions by mid-century, which would avoid overshooting 1.5 degrees Celsius of warming¹a target that is both ambitious yet feasible. The United

¹ IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24.
<https://doi.org/10.1017/9781009157940.001>.

States has adopted this target and has pledged to the world to get on the path to hitting it.² While the threats of climate change are clear, so too are the benefits of reducing climate pollution: better health, numerous well-paying clean energy jobs, a more livable environment, and more.

A key sector for early success in this task of decarbonization is the power sector, where technological solutions for decarbonization are widely available and economical. As such, the United States has adopted a target of reaching 100% clean electricity by 2035. Clean energy, such as solar and wind energy, has advanced dramatically in recent years and has often been the most cost effective source for new power generation even in the absence of inclusion of the cost of carbon emissions. The competitive advantages of clean energy over fossil power only grew when the United States enacted the Inflation Reduction Act in 2022, which is making hundreds of billions of dollars available for businesses, organizations, and individuals to produce clean energy and reduce carbon pollution.

Various expert modeling studies show that recently enacted policies, particularly the Inflation Reduction Act, move our country much closer to being able to achieve the nation's critical decarbonization goals, yet there still remains a substantial gap between the emissions reductions we are likely to achieve with current policies and the emissions reductions we need to achieve to meet our goals.^{3, 4, 5} Modeling shows that 111(b) and 111(d) standards and guidelines are critical for closing this gap and letting Americans realize the benefits of a clean energy future.⁶

The Proposed Rules Provide Ample Flexibility and Are Feasible to Meet

Several elements of the proposed standards and guidelines are deserving of recognition, notably the flexibility provided for meeting the standards and consequently their feasibility.

The proposals are designed to match the size of each power plant and the role it plays in the broader electric system. The proposals would keep the electric system reliable and economical and

² The United States of America Nationally Determined Contribution for the United Nations Framework Convention on Climate Change.

³ John Larsen, Ben King, Hannah Kolus, Naveen Dasari, Galen Hiltbrand, and Whitney Jones (August 12, 2022). "A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act." Rhodium Group. <https://rhg.com/research/climate-clean-energy-inflation-reduction-act/>

⁴ Megan Mahajan, Olivia Ashmoore, Jeffre Rissman, Robbie Orvis, Anand Gopal (August 2022). "Updated Inflation Reduction Act Modeling Using the Energy Policy Simulator." Energy Innovation Policy & Technology LLC.

⁵ J.D. Jenkins, E.N., Mayfield, J. Farbes, R. Jones, N. Patankar, Q. Xu, G. Schivley (August 2022). "Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022," REPEAT Project, Princeton, NJ. DOI: 10.5281/zenodo.6992940

⁶ Charles Harper, Sam Krasnow, Leah Stokes, Lissa Lynch, Sam Ricketts, Amanda Levin, Daniela Schulman, Jeff Slyfield, Christy Walsh (January 2023). "Powering Toward 100 Percent Clean Power by 2035: The Path to Carbon-Free Electricity After the Inflation Reduction Act." Evergreen Collaborative and Natural Resources Defense Council.

would spur industry adoption of cleaner power generation resources, resulting in cleaner air and a safer future for all of us.

Under the proposed rules, power plant owners and operators would have numerous ways to comply with the standards and guidelines. The standards and guidelines provide multiple compliance pathways and the trading and averaging across multiple facilities allowed for existing source compliance ensures that states and power generation fleet operators can choose the compliance options that make the most sense for them.

The feasibility of transitioning to an electric system largely powered by carbon-free power generation resources is well documented by expert researchers and widespread social and economic benefits for such a transition have been identified.^{7,8} Yet the feasibility of more widespread adoption of carbon-free generation technologies has been greatly increased through the unprecedented financial support offered by the Inflation Reduction Act.

Recommendations

We have four primary recommendations for EPA in these rulemakings: 1) finalize the rules as soon as possible; 2) expand the scope of the existing source guidelines to require more gas power plants to reduce carbon emissions; 3) consider increasing the stringency of new source gas standards for intermediate load sources; and 4) ensure environmental justice is served through these rules and that the needs of frontline communities are met.

Finalize the rules as soon as possible

Please publish final rules as soon as possible. Electric utilities across the Southeast are already engaging in critical long-term planning, usually called integrated resource plans. These planning processes occur every 1-3 years, with some utilities only doing them every 5 years. In order for the utilities to best be able to incorporate these regulations into their long-term planning, EPA must finalize them soon.

Carbon pollution rules for power plants are long overdue already. Experts have warned for decades about the risk of power plant carbon pollution, yet fossil fuel CEOs and their allies have caused delay after delay of meaningful regulations while our communities pay the price of inaction. Nine years have passed since the Obama administration proposed the Clean Power Plan, which coal

⁷ J. H. Williams, R. Jones, B. Haley, G. Kwok, J. Hargreaves, J. Farbes, et al. (2021). "Carbon-neutral pathways for the United States." *AGU Advances*, 2, e2020AV000284. <https://doi.org/10.1029/2020AV000284>

⁸ Amol Phadke, Umed Paliwal, Nikit Abhyankar, Taylor McNair, Ben Paulos, David Wooley, Ric O'Connell (June 2020). "2035 Report: Plummeting Solar, Wind, and Battery Costs Can Accelerate Our Clean Electricity Future." Goldman School of Public Policy, University of California Berkeley, GridLab, and PaulosAnalysis.

companies and their allies fought so that it would never go into effect. Now, the opportunities for strong pollution standards are even greater than they were then, and the severity of the climate crisis has only grown.

Expand the scope of rules for existing source gas plants

Analysis by the Natural Resources Defense Council (NRDC) of the proposed guidelines for existing gas plants, which would only apply to units larger than 300 megawatts and running at more than half of their rated capacity, would only address 30% of CO₂ emissions from existing gas-fired power plants, leaving the vast majority essentially unregulated.⁹ SACE supports EPA expanding the scope of existing gas-fired power plants that would be subject to the guidelines so as to not neglect so much harmful pollution. For example, NRDC found that changing the rule's thresholds to 100-150 MW and 40% capacity factor would increase applicability of the rule to about 80% of existing gas generation. Similarly, World Resources Institute recommends EPA lower the thresholds for the rule both to include units with lower capacity factors and all units sized over 25 MW.¹⁰

Consider increasing the stringency of new source gas standards for intermediate load sources

We are concerned that the large gap between levels of stringency to comply with the base load best system of emissions reduction (BSER) via the hydrogen pathway (96% co-firing with low-GHG hydrogen) and the intermediate load BSER (30% co-firing with low-GHG hydrogen) could lead power plant operators to only marginally reduce their capacity factors in order to have a much more lenient standard to meet. In the Southeast, most newer gas combined-cycle plants operate with capacity factors in the range of 60-70%. As part of its analysis to finalize the rule, EPA should compare emission reductions from these new gas plants operating at a reduced capacity factor to fall into the intermediate category to the emission reductions from these new gas plants continuing at expected levels and complying with the base load category to be sure this is not a large missed opportunity to deliver air pollution reductions. If there is a gap, we urge EPA to increase the stringency of the intermediate load by increasing the level of low-GHG hydrogen co-firing and/or lowering the capacity factor that separates intermediate load plants from base load plants.

Deliver environmental justice through these rules

Power plant pollution has dramatic impacts on frontline and fenceline communities. Given the large amount of flexibility offered by the proposed rules, different pathways for meeting compliance will also have varying social, economic, and environmental effects. We support EPA using this rulemaking

⁹ Sophia Ahmed (May 22, 2023). "Strengthen Power Plant Carbon Standards for Greater Climate Benefit." Natural Resources Defense Council.

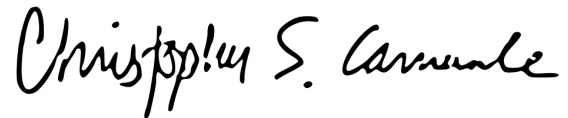
<https://www.nrdc.org/bio/amanda-levin/strengthen-power-plant-carbon-standards-greater-climate-benefit>

¹⁰ Dan Lashof (May 12, 2023). "EPA's Proposed Rules for Power Plant Emissions: 6 Key Questions, Answered." World Resources Institute. <https://www.wri.org/insights/epa-power-plant-rules-explained>

process to ensure that environmental justice is delivered through these rules and that the needs of frontline and fence-line communities are met.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink that reads "Christopher S. Carnevale". The signature is written in a cursive, slightly slanted style.

Chris Carnevale
Climate Advocacy Director
Southern Alliance for Clean Energy